

1           A public hearing of the Jefferson Proving Ground  
2       Restoration Advisory Board meeting was held at the Madison  
3       Jefferson County Public Library, 420 West Main Street,  
4       Madison, IN at 7:00 P.M. on August 14, 2002.

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6                   **OPENING STATEMENTS BY MR. PAUL CLOUD:**

7                   Okay. Good evening. I would like to get  
8       started and would like to welcome everyone to the JPG  
9       Restoration Advisory Board meeting. There are a number of  
10      handouts in the back, also an attendance sheet. I strongly  
11      encourage you to sign in. If you're not on our mailing list  
12      we will insure that you get additional notifications as long  
13      as you are signed in and keep you informed of events at the  
14      Proving Ground and when future meetings will be. So please  
15      do sign in. My name is Paul Cloud and I work for the Army.

16      I cover the environmental and restoration of the Proving  
17      Ground and reuse of the facility. I am the Army's co-chair  
18      for the facility. I welcome everyone here tonight. That's  
19      all the introductory remarks I have. Richard Hill is the  
20      community co-chair. Richard do you have any introductory  
21      remarks?

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1                   **MR. RICHARD HILL:**

2                   I'm sorry I wasn't listening. Good evening.  
3           That's enough.

4

5                   **MR. PAUL CLOUD:**

6                   Okay. I'd like to get started. We have a  
7           pretty full plate. Here's our agenda (showing). There's a  
8           copy of that back on the back table. Ah a number of things  
9           we'll talk about. The first one (1) is the UXO Clearance on  
10          the Western Parcel in the Cantonment area. This is the last  
11          area in the cantonment parcel for UXO Clearance.  
12          (Indicating) You can see it annotated there as the Western  
13          Parcel. The actual field work on that effort has been  
14          completed. The draft of the Clearance Report is currently  
15          being written and I think it has actually been delivered to  
16          the Huntsville Corps of Engineers for Preliminary Review.  
17          So we'll be expecting to see that later on. The next slide  
18          shows you the schedule. As far as I know we are  
19          essentially on schedule right now. We don't expect the  
20          completed Clearance Report or the Statement of Clearance  
21          until basically the end of the year. Once the report has  
22          been reviewed and any comments that Huntsville have been

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1       addressed we will make the report available to the community  
2       so they can see it before it goes final. Wouldn't expect  
3       that to happen until probably sometime late September or  
4       early October. But we will coordinate that and then once I  
5       get copies of it I will make sure that Richard is provided  
6       copies and we will have copies out at the Proving Ground if  
7       someone will - is interested. It's a fairly thick, about  
8       three (3) or four (4) inches thick. So it's not something  
9       that's easily duplicatable. Now what we have is a gentleman  
10      from American Technologies, Inc. or ATI. You may remember  
11      him from a RAB meeting earlier this year, he came in, Mr.  
12      Jim Daffron. He talked about the UXO Clearance on the three  
13      hundred (300) acre parcel. He's here again tonight to  
14      basically review that process and basically the completion  
15      of the field work which we intended ah to do once all the  
16      field work was done. So at this time I would like to  
17      introduce Mr. Daffron and I will turn over the mic to him.

18

19                   **MR. JIM DAFFRON:**

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1                   Good evening. Jim Daffron. I'm with  
2   American Technologies and I'll be ah talking to you about  
3   our involvement in the removal action on this Western Parcel  
4   at Jefferson Proving Ground. This is a project  
5   organization. I was the ATI project manager and we  
6   basically had the work divided into two (2) main areas. One  
7   (1) was kind of headed up by our geophysicist and it  
8   included activities like surveying, this land surveying,  
9   geophysical investigations and managing the GIS system with  
10   our Geographical Information System for data management.  
11   And then we had our UXO technicians. All the field work  
12   involves UXO work. It's supervised ultimately by the senior  
13   UXO supervisor, the SUXO. And he was also primarily  
14   responsible for making ah sure these activities were done,  
15   the Surface Clearance, also the brush clearing that was  
16   necessary for doing a geophysical survey and then the sub-  
17   surface clearance of ah potentially - potential unexploded  
18   ordnance. So this evening I'm going to go over, this is a  
19   kind of outline of the information I'm going to be  
20   describing which is basically the process that we went  
21   through in performing this work. I'll talk real briefly  
22   about mobilization activities and then the de-mobilization

1 and - and post-mobilization activities. The majority of my  
2 time I'll spend ah talking about the actual field work that  
3 we did and the results of that field work. Okay. But prior  
4 - prior to mobilizing anyone to the site we had to get  
5 approval through Huntsville for our UXO technicians. Ah  
6 they reviewed the people that we proposed in the various  
7 positions to make sure that they were qualified to hold  
8 those positions and form - perform those functions. Once we  
9 got authorization from Huntsville then we went ahead and  
10 mobilized, moved our equipment on site, ah established sub-  
11 contracts and vendors in the area and established a office,  
12 a field office there on Jefferson Proving Ground. Then we  
13 mobilized our full crew. Our crew ranged ah in size  
14 depending on what activities were going on, probably an  
15 average of about fourteen (14) people at one (1) time were  
16 on site. I'm going to describe the ah - the field work and  
17 the activities that took place. Some of these took place  
18 concurrently but ah they generally followed this - this  
19 sequence. One (1) of the first things that we did was the  
20 Geophysical Prove-out. In the Geophysical Prove-out what  
21 we did is went to an area that was near the removal site  
22 that was similar ah in - the geology and all was similar.

23

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1 And we - we knew the area was clean, didn't have metal so we  
2 were able to seed items in that area, items that we would  
3 expect to find. Things like sixty (60) millimeter mortars  
4 and the four and a half (4 ½) inch rockets that we suspected  
5 we might find on the site. And then we ran various  
6 geophysical instruments over the area using different  
7 techniques and - and determined what was the best method of  
8 collecting geophysical data, which one (1) would find the  
9 items at the depths that we expected to see them. And then  
10 we used that method and that technique and those techniques  
11 and performed the field work. I might cut off part of the  
12 slides but this is - I flip through my pictures too quick if  
13 I don't put them in slide presentation mode. We'll try that  
14 again. (Showing) Okay. This is ah one (1) of the  
15 instruments that we took out of the test plot, a  
16 magnetometer. There was another picture I intended to show  
17 that was using the M sixty-one (61), the other instrument,  
18 the geophysical instrument that we ah tested ah but we ended  
19 up using the magnetometer in the gradiometer mode and  
20 there'll be another picture of that in here as well. That  
21 turned out to be the best instrument to use for collecting  
22 geophysical data. And then the next step we - we did a

1 Surface Clearance. That was to remove any metal objects and  
2 any potentially hazardous objects whether it be unexploded  
3 ordnance or other hazardous objects before we did the brush  
4 clearing and then moved into the geophysical survey work.  
5 We have to remove the metal obviously because that would  
6 interfere with the geophysical instruments looking below the  
7 surface. These are - this is the result of that Surface  
8 Clearance that we performed. The ah - the map shows the  
9 outline of the area that was included in our scope of work  
10 and we put symbols up there representing where various OE  
11 related items were found during the Surface Clearance.  
12 You'll see several of them were up at that Northeast Corner  
13 at the intersection of two (2) roads. There was a lot of  
14 stuff on the surface right up in that area, a total of  
15 twenty-four (24) OE related items found, no unexploded  
16 ordnance found on the surface.

17

18 **MS. DIANE HENSHEL:**

19 Could you clarify what's in the spot down  
20 there (indicating) and what's in the two (2) in the center  
21 versus the others? Were there one (1) type versus another  
22 in another area?

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**MR. JIM DAFFRON:**

We - we laid it out - the site out in grids.

**MS. DIANE HENSHEL:**

Yeah.

**MR. JIM DAFFRON:**

And our scope work included initially a small - a strip of - an area along the roads basically and then some interior grids.

**MS. DIANE HENSHEL:**

No, no. I'm not asking you that. I'm asking - you've got a list here.

**MR. JIM DAFFRON:**

Yes.

**MS. DIANE HENSHEL:**

Of a number of different things that were



1 found.

2

3 **MR. JIM DAFFRON:**

4 Right.

5

6 **MS. DIANE HENSHEL:**

7 And there's essentially three (3) areas the  
8 way I see it, maybe four (4) if you want to break out that  
9 one (1) by itself, where things are found in. Is there a  
10 difference in terms of what was found in each of those three  
11 (3) areas? Can you characterize what was found in each of  
12 those three (3) areas as being different, the same, what  
13 were they?

14

15 **MR. JIM DAFFRON:**

16 Okay. Well I - I think most of them, and I  
17 don't - I would have to look carefully, more carefully to  
18 give you a real definitive answer. But I think that  
19 Northeast Corner, that's where most of the four and a half  
20 (4 ½) inch rocket components were found, the rocket motors  
21 and things like that. Ah I think there were a couple of  
22 flares found interior - in the interior of the - one (1)

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1 four and a half (4 ½) inch rocket was found in the interior  
2 grid.

3

4 **MS. DIANE HENSHEL:**

5 So you say the flares, one (1) was found in  
6 the interior grid and one (1) was found where?

7

8 **MR. JIM DAFFRON:**

9 What's that?

10

11 **MS. DIANE HENSHEL:**

12 On the two (2) flares, one (1) was found in  
13 the interior and one (1) was found where?

14

15 **MR. JIM DAFFRON:**

16 I don't remember specifically which one (1)  
17 of those was the flare. We do have a Web site that has all  
18 of this data tied to it and you can click on anyone of those  
19 symbols and get a description of what's in there. I don't -  
20 there was so much data collected and you'll see when we get  
21 into the sub-surface there were a lot of OE items found and  
22 I don't - I don't know where, which one (1) was found in

23

24

1       which specific location.

2

3               **MS. DIANE HENSHEL:**

4                       Okay. Thank you. Thanks.

5

6               **MR. JIM DAFFRON:**

7                       Okay.

8

9               **MS. DIANE HENSHEL:**

10                      Can I ask one (1) more question?

11

12               **MR. JIM DAFFRON:**

13                      Yes.

14

15               **MS. DIANE HENSHEL:**

16                      What was the depth to which everything was  
17 found?

18

19               **MR. JIM DAFFRON:**

20                      Well these were all found on the surface.

21                      So far we've just talked about the Surface Clearance. The

22 sub-surface clearance we'll get into a little bit. Most of

23

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1       those things were found fairly shallow. We were looking  
2       down to the maximum penetration depth for the sixty (60)  
3       millimeter mortars and things we expected to find.

4

5               **MS. DIANE HENSHEL:**

6                       Okay.

7

8               **MR. JIM DAFFRON:**

9                       But most of what we found ah was fairly  
10       shallow. Again all that data is tied into our GIS system  
11       and you can get the depths of any - any particular item that  
12       you're interested in.

13

14               **MS. DIANE HENSHEL:**

15                       Okay.

16

17               **MR. GLENN EARHART:**

18                       Jim I think most everything was  
19       predominantly in the top six (6) inches.

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21               **MR. JIM DAFFRON:**

22                       That's - that's probably --

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**MR. GLENN EARHART:**

Most of the stuff was found in the top six  
(6) inches.

**MR. JIM DAFFRON:**

(Showing) This is one (1) item that we  
found. This is an inert four and a half (4 ½) inch rocket  
that was found on the surface. And then these were some  
signal flares that were found still in their original  
packing. Those were not very old. Probably were used  
towards the end of the time that the facility was used and  
just left there on the surface. Probably not very old. The  
- along with doing the Surface Clearance kind of at the same  
time we were laying out grids you can just - normal  
surveying techniques and instruments, land surveying, we  
laid out grids to help identify where we were and where we  
were finding things and track the results. Pretty straight  
forward. We hired someone to come in and do the surveying  
for us. After ah the Surface Clearance was done and we knew  
there weren't any hazards on the surface then we started

1 clearing the brush that was necessary to get out of the way  
2 before we started geophysical survey. It was pretty much  
3 under brush. We didn't cut things over about three (3)  
4 inches in diameter. We used a couple of methods where we  
5 had a large piece of equipment with an arm that we could  
6 reach in around that proved to not be very effective. It  
7 was pretty wet out there so we tried some other techniques,  
8 smaller, lighter weight mechanical brush cutting methods.  
9 And then in certain areas we used weed eaters and chain saws  
10 and things like that where it was just too wet for equipment  
11 and all. After clearing the brush then we were able to come  
12 in and do the geophysical survey and that's where we're  
13 looking below the surface for metal and we use that - we  
14 used the gradiometer. As I said before that proved to be  
15 the best geophysical instrument in the test plot so we used  
16 that for the investigation. (Indicating) This is a picture  
17 of one (1) of our data collectors out on one (1) of the  
18 grids collecting data. And all the data is downloaded to a  
19 computer so that the geophysicists can then take and plot on  
20 the map. (Indicating) This is an image of one (1) of the  
21 grids with the anomalies, the geophysical anomalies,  
22 basically the things that created a magnetic field under the  
23

1 ground. It's a little bit hard to see on the slide but on  
2 that map there are little plus signs with numbers on them.  
3 Those are anomalies that were identified and investigated.  
4 You can see this - this particular grid had quite a few  
5 anomalies we dug up and quite a few pieces of scrap metal  
6 off of this grid. And then finally after the map was  
7 generated and the anomalies were selected then we had to go  
8 back out and re-acquire those anomalies, find them in the  
9 field and measure back into where we had located them and  
10 then dig them up and determine what was causing the  
11 anomalies. In most cases it was - had nothing to do with ah  
12 ordnance but we - we re-acquired them using just that hand  
13 held magnetometer. Yes?

14

15 **MR. GLENN EARHART:**

16 Could I make one (1) point? After we ah -  
17 after ATI reviewed all the geophysical data it was then  
18 quality assured by the Huntsville geophysicist. So once ATI  
19 made their selection of items that they thought looked like  
20 ---- then it came down to Huntsville and our geophysicists  
21 looked at the same items. And so once ATI made a selection  
22 we selected additional anomalies above and beyond what they

23

24

1       selected as a quality assurance procedure. But I wanted to  
2       make - make it clear that this - this data, the geophysical  
3       data, was reviewed by - by numerous physicists to get to the  
4       conclusions that we came to which essentially is what items  
5       do we dig because we think they may be warranted.

6

7                   **MR. JIM DAFFRON:**

8                   And there were - basically we had a field  
9       geophysicist responsible for collecting the data and he made  
10      the initial picks. We have our own project geophysicist who  
11      reviewed the data and then forwarded it to Huntsville and  
12      then in all cases Huntsville made additional picks that we  
13      would go in. And you can tell - if you remember back at the  
14      geophysical map that we looked at, all those, those plus  
15      signs, and we picked just about everything that could be -  
16      that looked anything at all like an anomaly and in a lot of  
17      cases they were very small anomalies and turned out to be  
18      pieces of wire, a nail or something very small.  
19      (Indicating) This is just a picture of going in and digging  
20      up the anomalies and seeing what they are.

21

22                   **MS. DIANE HENSHEL:**

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1                   What's the smallest piece of metal you  
2    found?

3

4                   **MR. JIM DAFFRON:**

5                   We found some really small pieces of wire  
6    and nails. I don't know the size but it was - it was some  
7    really small stuff I guess that we picked up.

8

9                   **MS. DIANE HENSHEL:**

10                  Yeah nails are heavily - heavily iron filled  
11    though. So you think that the signal would be stronger.

12

13                  **MR. GLENN EARHART:**

14                  He got several false spots especially since  
15    it was real close to the surface.

16

17                  **MR. KEN KNOUF:**

18                  A lot of horse shoes.

19

20                  **MS. DIANE HENSHEL:**

21                  Are you serious?

22

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1                   **MR. KEN KNOUF:**  
2                               Lots of farm land.  
3  
4                   **MS. DIANE HENSHEL:**  
5                               Oh my gosh how cool.   Were the horse shoes  
6 deeper?   They should have been.  
7  
8                   **MR. KEN KNOUF:**  
9                               No.  
10  
11                  **MS. DIANE HENSHEL:**  
12                               No?  
13  
14  
15                  **MR. KEN KNOUF:**  
16                               No.   It was farm land.  
17  
18                  **MS. DIANE HENSHEL:**  
19                               Well I know.   They could get buried.  
20  
21                  **MR. JIM DAFFRON:**  
22                               (Indicating) This graph represents all of  
23  
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1 the OE related items that we found. It looks like a lot but  
2 it - but I turned off all the non OE related items. And if  
3 you turn that layer back on then you just about can't see  
4 anything else because there was so many more non OE items  
5 found that really the OE items would represent only about  
6 seven (7) percent of the items that we investigated.

7

8 **MR. BOB HUDSON:**

9 Does the railroad track run through there --

10

11 **MR. JIM DAFFRON:**

12 Yeah.

13

14 **MR. BOB HUDSON:**

15 -- about where that group is right there in  
16 the center?

17 **MR. JIM DAFFRON:**

18 Yes. About where - just about where the map  
19 cuts in.

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21 **MR. BOB HUDSON:**

22 Cuts in?

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**MR. JIM DAFFRON:**

Right.

**MR. BOB HUDSON:**

And the railroad passes right past that point?

**MR. JIM DAFFRON:**

That's right. Yeah. And we found a lot of non OE related scrap up around the railroad. But you see we - we cleared a hundred (100) and - or did investigation removal on a hundred and sixty-seven (167) acres. Like I said before we found twenty-four (24) items on the surface that could be classified as OE related. We did ah five thousand four hundred and eighty-nine (5489) sub-surface investigations and digs. We dug that many anomalies. Of those eighty-seven (87) percent of them were determined to be non OE related, seven (7) percent were OE related and they varied from anything from small pieces of fragment, ah found some grenade pins to you know some sixties (60) and rockets. All were inert. We didn't find any - any

1 unexploded ordnance on site at all. We also found a number  
2 of QA items. Those were items that were seeded before we  
3 came to the site by Huntsville to determine whether our  
4 geophysics was effective in finding items. Found thirty-one  
5 (31) of those. And then we had a number of no contacts.  
6 And the reason for a lot of those no contacts is because we  
7 picking so many anomalies sometimes an anomaly was caused by  
8 something other than you know a piece of metal or something  
9 in the ground. Sometimes when you made one (1) pass through  
10 one (1) lane and you come back you would pick up the same  
11 piece of metal at a slightly different location. So a lot  
12 of cases we were picking things so close together that it  
13 really - we had already - we picked the same item twice in  
14 some cases. Sometimes it would depend on the orientation of  
15 the item. You get a positive and negative field and you're  
16 detecting that as you go through and sometimes it looks like  
17 two (2) items next to each other when it's really one (1)  
18 item just the way it's oriented. That's the reason for the  
19 number of the no contacts.

20

21 **MS. DIANE HENSHEL:**

22 Two (2) questions. What was your percent

23

24

1 recovery on the QA items?

2

3 **MR. JIM DAFFRON:**

4 We ah - we missed two (2) QA items. One (1)  
5 was an error in the way we re-acquired the item. Ah we  
6 actually detected it in the geophysical ah investigation but  
7 it was an irregular shaped grid. It wasn't square and our  
8 methods to - that we were using to relocate that put us off  
9 the location of the actual anomaly and actually dug in a  
10 location found a piece of metal, assumed that was the cause  
11 of the anomaly and it wasn't. It was the QA item. The  
12 other --

13

14 **MS. DIANE HENSHEL:**

15 Wait a second. Could you go back and  
16 explain that because it sounds to me like you may have  
17 missed other stuff then if you had a - it sounds like your  
18 geophysical survey was not necessarily matched with where  
19 you dug then, is that right? Could you explain what you  
20 just said?

21

22

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1                   **MR. JIM DAFFRON:**

2                   The geophysical survey detected, it showed  
3 up, it was picked as an item to - to ah re- - to  
4 investigate.

5

6                   **MS. DIANE HENSHEL:**

7                   Right.

8

9                   **MR. JIM DAFFRON:**

10                  And when they went back to re-acquire it  
11 they didn't get to the right location.

12

13                  **MS. DIANE HENSHEL:**

14                  Why not?

15

16                  **MR. JIM DAFFRON:**

17                  Well because it was an irregular shaped grid  
18 and the method we used to relocate that is we pull tapes in  
19 from two (2) corners of the grid and we were pulling them in  
20 from opposite corners of the grid and it created an arc.  
21 And because the item was near the center of the grid those  
22 arcs actually intersected in two (2) places about five (5)

23

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1 feet apart from each other. And because - because we were  
2 using opposite corners instead of adjacent corners we  
3 actually got arcs that intersected twice in the grid. And  
4 so we actually went to the wrong intersection of those two  
5 (2) arcs. We changed our method of re-acquiring and used  
6 just adjacent corners so that you only get one (1)  
7 intersection in a single grid. And that eliminated any  
8 possibility of going to the wrong intersection of those  
9 arcs.

10

11 **MS. DIANE HENSHEL:**

12 So you did the QA items first, went back  
13 before you did any of the OE items? Is that correct?

14

15 **MR. JIM DAFFRON:**

16 No. They were hidden in - in the grids. We  
17 didn't know which items were QA items and which ones  
18 weren't.

19

20 **MS. DIANE HENSHEL:**

21 All right if that's true then what's the  
22 possibility that you missed other items because of that same

23

24



1 type of error?

2

3 **MR. JIM DAFFRON:**

4 Well I think it's probably pretty rare  
5 because we corrected that problem and went back and re-did  
6 the grid and didn't find any ah - any other items that we  
7 missed.

8

9 **MS. DIANE HENSHEL:**

10 But that was only for that one (1) grid? I  
11 mean - do you understand my question?

12

13 **MR. GLENN EARHART:**

14 Yes. And I think it basically boils down to  
15 what Quality Assurance that the government has. We had four  
16 (4) Quality Assurance projects. Number one (1) we had a guy  
17 in the field the entire time that they were doing their  
18 work. We were able to verify because we had the same  
19 response when they couldn't find the QA items. So we were  
20 able to verify what happened and why. The other - the other  
21 two (2) QA processes that we had was that our geophysicist  
22 analyzing the same data, picking the same digs, additionally

23

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1 making additional grids or additional anomalies. And our  
2 third QA was the fact that we had seeded - I believe - how  
3 many was it? Thirty (30) or thirty-two (32)?  
4

5 **MS. DIANE HENSHEL:**

6 He says thirty-three (33).

7 **MR. GLENN EARHART:**

8 Thirty-three (33). I don't remember. But  
9 we purposely seeded those items before they did the  
10 geophysics. We knew where they were so that we - so we had  
11 - that was a QA. We had joint analysis of all the digital  
12 data. We had a - we identified in some cases probably  
13 twenty (20) to thirty (30) extra digs in the grid on those  
14 anomalies that were on the border line of what we centered  
15 in magnetic range.  
16

17 **MS. DIANE HENSHEL:**

18 But if you didn't go back and re-survey how  
19 do you know that they didn't do the same thing and get one  
20 (1) over here instead of one (1) over there?  
21

22 **MR. GLENN EARHART:**  
23  
24

1                   Okay. The reason we know that is because  
2 the - our on site guy did anywhere from ten (10) to eighty  
3 (80) percent QA after they were done. So after they did the  
4 grid and said yeah we're completed with the grid, before we  
5 would pay them our field guy went back and re-surveyed their  
6 entire grid.

7

8

9                   **MS. DIANE HENSHEL:**

10                   Ah. Okay.

11

12                   **MR. GLENN EARHART:**

13                   Now he didn't do all the grids. I mean  
14 there were some grids that had only four (4) anomalies.

15

16                   **MS. DIANE HENSHEL:**

17                   Okay.

18

19                   **MR. GLENN EARHART:**

20                   So he used his better discretion on what  
21 grids. The grids that had a lot of anomaly he did more QA.

22

23

24

1                   **MS. DIANE HENSHEL:**

2                               And how many times when he went back did he  
3 have to send them back out again?

4

5                   **MR. GLENN EARHART:**

6                               I don't think he had to. Did we have any QA  
7 failures other than those two (2) QA grids that you seeded?

8                               I don't think so.

9

10

11                   **MR. JIM DAFFRON:**

12                               We only - we repeated two (2) grids. Ah  
13 that was one (1) of them. And the other one (1) was one (1)  
14 further south.

15

16                   **MS. DIANE HENSHEL:**

17                               Which was where?

18

19                   **MR. JIM DAFFRON:**

20                               Ah I don't remember the other one (1) that  
21 we repeated.

22

23

24



1       - historically we knew there wasn't much there.

2

3               **MS. DIANE HENSHEL:**

4                       Yeah.

5

6               **MR. GLENN EARHART:**

7                       From the Archives Search Reports. We did an  
8       EECA. During our EECA I think we did like five hundred  
9       (500) digs and didn't find anything in five hundred (500)  
10      digs. Now we just did almost six thousand (6,000) more digs  
11      and that's difficult. We were trying to prove a negative.

12

13               **MS. DIANE HENSHEL:**

14                       Okay.

15               **MR. JIM DAFFRON:**

16                       One (1) thing we did too was we - we - like  
17      as I said the one (1) we missed was early on. We looked at  
18      why we missed it and I think it was pretty obvious once we  
19      looked - started looking at it, how we made the mistake. We  
20      changed the way we were re-acquiring. We also went back and  
21      looked at, and had the geophysicists look at the results of  
22      the digs ah as another Quality Control and see if what they

23

24

1 found at the depth they found it made sense based on the  
2 response of the instruments. So they can go in and say well  
3 if you found a nail and it was you know a foot deep it  
4 shouldn't have made the same response as that sixty (60)  
5 that was out there. So by - by going back and looking at  
6 actual results of what they recovered, you know if it was  
7 something smaller than a - at a deep depth it should have  
8 had a small response. But if the target that they were  
9 going after had large response it should have been something  
10 more - something bigger or closer to the surface then they  
11 could see that. So we started having our geophysicists pay  
12 closer attention, review all the results of the - that the  
13 dig teams would bring back in.

14

15 **MS. DIANE HENSHEL:**

16 Okay.

17 **MR. JIM DAFFRON:**

18 So we did make some improvements in our  
19 process ah and we could go back and look at that previous  
20 grids once we realized we had missed that to see if there  
21 were any others that could have been missed in the same way.

22

23

24

1                   **MS. DIANE HENSHEL:**

2                   Okay ah one (1) more question. And this is  
3 just a - just verification here. Ah you used seven (7)  
4 percent OE related items?

5

6                   **MR. JIM DAFFRON:**

7                   Yes.

8

9                   **MS. DIANE HENSHEL:**

10                  And the comment earlier was that ten (10)  
11 percent, only ten (10) percent were below six (6) inches?  
12 What percent of the OE related items were above that six (6)  
13 inches and what were below the six (6) inches of depth  
14 approximately?

15

16                  **MR. GLENN EARHART:**

17                  Ah I think - I can't without looking at the  
18 Inspection and Project Report, I can't remember because I  
19 just went through an exercise so I can't remember of any OI  
20 rel - OE related items much below ah six (6) inches. I mean  
21 most - most of the OE related items were shot flares. That  
22 one (1) --

23

24



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**MR. JIM DAFFRON:**

I think that they found some hundred (100)  
pound bomb fragments that were deep.

**MR. GLENN EARHART:**

Southern portion.

**MR. JIM DAFFRON:**

But almost everything was on the surface.

**MS. DIANE HENSHEL:**

In the southern portion they were deep?

**MR. GLENN EARHART:**

Now deep we're talking eighteen (18) inches.

**MS. DIANE HENSHEL:**

Right. But wouldn't the deeper ones most  
likely be there from just firing rather than from dumping?

**MR. GLENN EARHART:**

No.

1

2

**MR. PAUL CLOUD:**

3

No.

4

5

**MS. DIANE HENSHEL:**

6

No? Then what's it from then?

7

8

**MR. GLENN EARHART:**

9

There was no evidence of these firing. No.

10

11

**MS. DIANE HENSHEL:**

12

Well I knew the firing's up here but nothing

13

was fired ever?

14

15

**MR. GLENN EARHART:**

16

I mean if we --

17

18

**MR. BOB HUDSON:**

19

Wait a minute. It couldn't have got fired

20

here in this part.

21

22

23

24

1                   **MS. DIANE HENSHEL:**

2                               So how did it get to eighteen (18) inches  
3       depth?

4

5                   **MR. GLENN EARHART:**

6                               If it's a fired area?

7

8                   **MS. DIANE HENSHEL:**

9                               Yeah.

10

11                   **MR. GLENN EARHART:**

12                               You would expect to see fragments there. I  
13       mean if you went in there you would expect to see other  
14       items in the same area or fragments. That's what was unique  
15       about all this data. We were finding one (1) small two (2)  
16       inch fragment in a sixty (60) foot area and which really  
17       didn't give you an indication of firing at the impact areas  
18       either burial or ah like give these guys credit. I don't  
19       know if you saw the - the conditions out there but it was a  
20       quagmire.

21

22                   **MS. DIANE HENSHEL:**

23

24

1 Un-huh (yes). It was a wetland.

2

3 **MR. GLENN EARHART:**

4 And when you take equipment in there it  
5 presses down on these items. The items were on the surface  
6 and plus too they went down further. Ah we found no  
7 evidence of any impact. We didn't find any grids where  
8 there were a lot of fragments close together.

9

10 **MS. DIANE HENSHEL:**

11 Okay.

12

13 **MR. GLENN EARHART:**

14 But they were all individual single  
15 fragments.

16

17 **MS. DIANE HENSHEL:**

18 Okay. So in other words at this point  
19 you're pretty well close to a hundred (100) percent certain  
20 there is nothing live left, no chance of anything that's  
21 dangerous?

22

23

24

1                   **MR. GLENN EARHART:**

2                               Well I mean we're - I'm prepared and our  
3 office is prepared to issue a Statement of Clearance FOST  
4 that says that area can be unrestricted use.

5                   **MS. DIANE HENSHEL:**

6                               Okay.

7

8                   **MR. PAUL CLOUD:**

9                               For excavation.

10

11                   **MS. DIANE HENSHEL:**

12                               For excavation?

13

14                   **MR. PAUL CLOUD:**

15                               The Army will not supply a hundred (100)  
16 percent easement but there will be the standard disclaimers  
17 as in the other areas that - just due to the nature that the  
18 facility was a former military base - if anything else is  
19 found any future owner has to allow us to come and take care  
20 of it. We can't provide a hundred (100) percent absolute  
21 guarantee. We think we have done above and beyond a  
22 reasonable effort here and we feel very comfortable with it.

23

24

1  
2           **MR. JIM DAFFRON:**  
3  
4

5                           And I apologize. I don't remember exactly  
6 what was found in each spot and the depth but that is part  
7 of the Final Report. It will all be there and you can go in  
8 and see ah you know what item was found at what depth and  
9 you know you can actually go back and look at where it was  
10 found, where on the map. Again it's also available on our  
11 GIS system where it shows it graphically it's pretty easy.  
12 Although with that many hits you know it can still take a  
13 while particularly if you're looking at the non OE related  
14 scrap, the five thousand (5,000) or so hits. But it is  
15 there and it's available. What we found is basically what  
16 they said. There was no evidence that - or any indication  
17 that we would find something live if we continued to - to ah  
18 look. I mean you can go out there and do another  
19 geophysical survey and you might turn up another piece of OE  
20 related scrap. There's always that possibility that there's  
21 something not - that wasn't covered. I mean no method is  
22 going to be perfect in finding everything. But we feel  
23  
24

1 pretty comfortable with the data we've got and the results  
2 of our excavation that there isn't really an explosive  
3 hazard in the area that we're working. (Indicating) And  
4 these are some of the pictures of the items that we found.  
5 Primarily what's in this picture is some components, some  
6 rocket motors from four and a half (4 ½) inch rockets.  
7 That's part of the hundred (100) pound bomb fragment. I  
8 think that was maybe the deepest OE item that we found.  
9 This is a land mine that was found. Sixty (60) millimeter  
10 mortars just something we expected to find. We found a  
11 large variety of different OE items but sixties (60) were  
12 one (1) of the ones that we were specifically looking for  
13 and we did find a few of them. Shows a point detonating a  
14 fuse. These are some small arms cartridge cases. This is  
15 one (1) of the Corps QA items. We put them in with  
16 identifications so that they could tell where we were  
17 supposed to find it. They then looked to see if we said we  
18 found it where it was so they checked that we were actually  
19 finding things where they were supposed to be and that we  
20 were finding things that we should be finding. This is a  
21 picture - there was I think maybe three (3) cases where we  
22 found rounds that were in the ground or one (1) above ground

1 and two (2) in the ground that we couldn't tell without  
2 completely taking them out whether or not they were live or  
3 not. And rather than taking any chances with excavating it  
4 we put some ah - some penetrating charges on it and actually  
5 shot the round. In all cases they showed that they were  
6 inert, the wax filled sixties (60) that they found that they  
7 went ahead and detonated in place or put those charges on.  
8 You can kind of tell from that picture that it's fairly  
9 close to the surface. I don't know the depth. But that's  
10 probably you know just a few inches below the surface. I  
11 think that's fairly typical of what we were finding,  
12 something near the surface. (Indicating) A little closer  
13 picture of the penetrators on the - on the round. And so  
14 that's the field work. And then after the field work is  
15 done we take all the data, we put it together into a Final  
16 Report. That you know becomes part of the record and that's  
17 what we're working on now. We've got a draft of it. It's  
18 being reviewed and hopefully we will get comments back and  
19 get the final out soon. The Web site which is available to  
20 ah - for new information on the site is procommander.com.  
21 We set it up for all of our project sites and then we used  
22 it during the project and also as a method of presenting

23

24



1 information to the public and to our clients and our sub-  
2 contractors. There's a lot of information out there,  
3 basically everything that's in the Final Report is available  
4 there as well. Any questions?

5

6 **MR. GLENN EARHART:**

7 One (1) comment. This ah - this data  
8 information system that we used for Jefferson Proving Ground  
9 is reported in the world wide UXO forum, --- forum in  
10 Orlando in September I believe. But it's state of the art  
11 stuff that we're getting out to the rest of the world about  
12 how to manage data, some large volumes of data.

13

14

15 **MR. JIM DAFFRON:**

16 Yes. And it was set up as a project  
17 collaboration site and the main objective was to be able to  
18 share information and data at remote locations. Our office  
19 is in Oak Ridge and we're doing the work here. We had  
20 geophysicists in as many as three (3) locations at a time  
21 all looking at the data so they would upload the data from  
22 the field and it would then be available for review and -

23

24

1 and processing at various sites and you know we could get  
2 pretty quick turn around. As soon as collected the data we  
3 could process it and within a day be back out re-acquiring  
4 the anomalies and posting the results. So it was - it  
5 proved to be pretty effective during the - the ah project  
6 itself and hopefully it's still being used to you know show  
7 the results.

8

9 **MR. PAUL CLOUD:**

10 Any other questions for Jim? Thank you Jim.  
11 I appreciate it.

12

13 **MR. JIM DAFFRON:**

14 Okay.

15

16

17 **MR. PAUL CLOUD:**

18 What I would like to do now is we have a  
19 short video on UXO Clearances and their potential impact on  
20 the environment. It's a video that was - has been prepared  
21 by the Army Environmental Center and we will have it  
22 available at the Proving Ground if anyone would like to

23

24

1     borrow it or see it again.  It's about fifteen (15) or  
2     nineteen (19) minutes.

3

4 ( PLAYING VIDEO )

5

6

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14

Any actions depicted with unexploded ordnance are being performed by highly trained professionals. Though the work may look simple it is very dangerous. As the U.S. military downsizes thousands of acres of former military training lands are available to be turned over to the public for new uses. Because these areas may contain unexploded ordnance the military is working closely with decision makers to insure that informed response actions are taken.

23

24

1       Preparing former ranges for safe public use however is not a  
2       simple task. Clearing unexploded ordnance is very difficult  
3       with today's technology. More importantly it can have  
4       significant long lasting effects upon the environment. To  
5       make wise balanced decisions concerning these areas decision  
6       makers must understand how clearing unexploded ordnance can  
7       impact the environment, in some cases for hundreds of years  
8       to come. Ranges across this country have been used  
9       throughout the 19th and 20th centuries to train personnel to  
10      effectively protect the United States of America. In  
11      addition to keeping our country safe this training has had  
12      two (2) consequences: unexploded ordnance and environmental  
13      preservation. The military training created areas with  
14      unexploded ordnance or UXO. Because these rounds, which did  
15      not explode upon impact, can cause injury or death if  
16      someone disturbs them, the military kept personnel safe by  
17      carefully securing these lands. The second consequence from  
18      these training activities was environmental preservation.  
19      Because these areas were kept off limits to people and  
20      development military ranges represent some of the best  
21      preserved land in the world. They are probably as close to  
22      an untouched landscape as you will find anywhere off of a

23  
24

1 national park and indeed some of the buffer zones at the  
2 larger ranges, at places like the Goldwater Range or the -  
3 or Nellis or some of the big ranges in the Great Basin area,  
4 Dugway Proving Grounds and so forth, they're probably even  
5 less distrubed by human intervention than a typical national  
6 park because they have a lot fewer visitors. And so for  
7 those species that depend on that kind of landscape and  
8 particularly for the species that need a lot of space, that  
9 need to have the ability to range across tens of thousands  
10 of acres, they're absolutely precious. The installation  
11 offers large expanses habitat. Habitat is a very critical  
12 requirement for threatened and endangered species. Without  
13 it they cannot exist. And military installations are often  
14 the last strongholds for these species to exist. As an  
15 example here at our installation we have one (1) endangered  
16 species, two (2) threatened wildlife species and an  
17 additional thirty-five (35) wildlife species that have some  
18 level of sensitivity by the federal and state government.  
19 We also have five (5) sensitive plant species and seven (7)  
20 sensitive national communities. When evaluating the impact  
21 that military training has on threatened and endangered  
22 species, outwardly it might appear that military training is

23  
24

1 highly destructive in nature. However, in reality these  
2 actions are usually temporary and short in duration, they're  
3 reviewed beforehand and they're highly regulated. We have  
4 several mandates that require us to conserve wildlife  
5 species as well as natural resources here at the  
6 installation. We are required to comply with all of these  
7 laws and regulations and we're held strictly accountable to  
8 them, much more strictly than non-governmental agencies  
9 are. As ranges move from military to public use decision  
10 makers should carefully consider the impact of UXO response  
11 actions on the soil, the water and particularly the habitat.  
12 Decision makers therefore need to understand how UXO  
13 Clearance technologies work. One of the things we have to  
14 do first is to remove vegetation to insure that our UXO  
15 technology folks can actually see the - the UXO and the  
16 fragmented metal on the surface of the ground. Classically  
17 in the business you remove vegetation by one (1) of three  
18 (3) different ways. In many impact areas at many ranges are  
19 - are routinely maintained by controlled burning and what  
20 they do is that they set fires and they have fire breaks and  
21 safeguards and they burn the vegetation down to the ground.  
22 That's a very effective way because no one has to go into

23  
24

1 the impact area. We set the fires on the outside and it  
2 burns to the inside. The second way, again not done so much  
3 anymore, but was routinely done in the 70s and 80s, is to  
4 apply herbicides whether it's ah you know it's something  
5 that will go in and kill vegetation. At the NMR what we're  
6 doing is physically going in with chain saws and weed  
7 whackers and removing the vegetation at the ground surface.  
8 Once we've done that the UXO folks go in and do what's  
9 called a Surface Clearance. A Surface Clearance is  
10 literally that, we are looking for and physically removing  
11 fragmented metal, pieces of target and debris and any  
12 unexploded ordnance item. If it's a piece of debris  
13 obviously they can simply take it out of the ground and go  
14 on to the next anomaly. But if they see it's an ordnance  
15 item, a UXO, they have to then go through a set of very  
16 precise procedures to identify whether this item is stable,  
17 whether it's a immediate trap or whether it is something  
18 that can be transported. In many cases they can't make the  
19 determination that it's - that it is stable or they make the  
20 determination that it's unstable, and it is unsafe to be  
21 moved, transported or otherwise disturbed, so they have to  
22 what - they use the term called blow it in place. They will

23  
24

1        simply put these explosives devices on the ordnance item,  
2        move away a safe distance, ah and blow it in place. Fire in  
3        the hole. Fire in the hole. Fire in the hole. Fire in the  
4        hole. Fire in the hole. Sometimes they will pile up sand  
5        bags around the items to be - to be blown in order to  
6        minimize the fragmentation, minimize noise and to  
7        surrounding inhabited areas. That leaves us what - with  
8        there are things in the ground that we can't see physically.  
9        At that stage we use geophysical instruments to tell us  
10       what's below the surface. The first and - and the easiest  
11       is a - an instrument called a shawn staff. It's a  
12       magnetometer. It's a metal detector or flux gate  
13       magnetometer and this is a stick like apparatus that the  
14       technology folks wave back and forth and it emits a - a tone  
15       or a sound or a flash of light when it detects metal. Our  
16       technologists listen for the beep and then they put a - a  
17       pin flag, it's simply a plastic flag, in the ground to mark  
18       where they found the sound. Because it's a magnetometer and  
19       they put a flag in, that's called mag and flag. And really  
20       what they're doing is they're simply detecting metal from  
21       just below the surface to maybe about two (2) feet down.  
22       There's no - they have no idea what the piece of metal is.

23  
24



1       It could be a fragmented metal, it could be an ordnance item,  
2       it could be a piece of debris. So that leads us to a very  
3       significant problem of how do we know what this anomaly is  
4       and there's no way of finding out and that's to interrogate  
5       it, or excavate it or dig it up. Other technologies are  
6       available but all require removal of vegetation and a great  
7       deal of excavation which can be environmentally destructive.  
8       We have a fairly high confidence level in on our detection  
9       technologies as a result of efforts that we've conducted  
10      from about 1994 to date. Ah what we don't have a good  
11      handle on are discrimination technologies. In - in that  
12      regard what I mean is that we can't really reliably identify  
13      what's left in the ground or what actual piece of ordnance  
14      might be in the ground. But our detection capabilities,  
15      some organizations, one (1) governmental and several  
16      contractors that I can think of, have fairly reliable  
17      detection technologies, in the ninety plus (90+) percent  
18      range. So you know that's a good thing. Contractors have  
19      worked together over a number of years collaboratively to -  
20      to improve the detection capabilities and I hold out hope  
21      that they will also continue to work together with respect  
22      to discrimination technologies. Until we find alternatives,

23  
24

1 range clearance operations must use existing technologies  
2 and unfortunately even the best of these current  
3 technologies cannot guarantee that one hundred (100) percent  
4 of all UXO will be found. Furthermore these technologies  
5 can be destructive to plant and wildlife habitats as well as  
6 some precious cultural resources such as Native American  
7 artifacts. This is a unique processes involved in creating  
8 the soil horization in this profile which can take at  
9 least eight hundred (800) to fifteen hundred (1500) years  
10 for these layers to form the way they are. The removal of  
11 UXO at a depth of two (2) foot in this profile, would  
12 destroy close to fifteen hundred (1500) years of soil  
13 profile development. Another soil that's very similiar to  
14 this particular soil is called a barreland which is much  
15 more poorly drained and in fact even within the Pocomo  
16 Forest here in Worcester County we have areas that supports  
17 stagmant moss and some pretty unique animals that are  
18 associated with that type of habitat. So then again you're  
19 looking again at a choice of not only are you disturbing an  
20 extremely unusual soil profile you also are removing ah  
21 plants and animals or the habitat for some plants and  
22 animals in those areas. Decision makers can help control

23  
24

1 the amount of environmental impact by making wise land use  
2 decisions. Let's look at how land use impacts the  
3 environment. If you plan to put a housing complex or a  
4 shopping center on the land for instance the unexploded  
5 ordnance must be cleared to allow construction personnel to  
6 dig deeply into the earth. If you think of soil as the  
7 foundation of life and where life is actually occurring  
8 within the soil profile ah you can look at it from two (2)  
9 points of view. You have animals and microorganisms that  
10 basically feed off the surface land. Ah grasses dominantly  
11 feed off the surface land. And then you look in a forest  
12 and you see tap roots that go down ten (10) or twelve (12)  
13 feet. So soil isn't just a six (6) inch layer at the - at  
14 the you know top of the ground. Ah when I say soil supports  
15 life there's life down to a great depth. The removal of UXO  
16 would in effect remove all the vegetation all down to a  
17 certain depth. And at that point when you have exposed soil  
18 you have increased or accelerated erosion versus leaving it  
19 in its natural state. Other land uses such as agriculture  
20 require more shallow digging into the soil and consequently  
21 less invasive UXO Clearance. If the area will be used as a  
22 nature preserve little UXO Clearance may be necessary at

23  
24

1 all. Signs, barricades and fences can be installed to keep  
2 people away from UXO and UXO away from people.  
3 Additionally, those living nearby can be educated about  
4 using these areas safely. It's important to keep in mind  
5 also that each former range generally has many acres that do  
6 not contain any UXO. Extensive UXO Clearance and  
7 environmental destruction can be avoided by simply building  
8 in those areas where there is no UXO. Many people are now  
9 safely enjoying former range areas and the environmental  
10 benefits they provide. One (1) example, the Patuxent  
11 Research Refuge in Laurel, Maryland where the public as well  
12 as wildlife biologists take advantage of eighty-one hundred  
13 (8100) acres of former military training land. The  
14 Department of Defense turned over this land from Fort Meade  
15 in 1991 adding an expansive territory of vegetation,  
16 wildlife habitat to the nearby Patuxent Refuge. The refuge  
17 was first established in 1936 as a premier site for wildlife  
18 research. With the addition of the north track the land now  
19 offers the public space for hunting, fishing, bicycling,  
20 hiking and other recreational activities. The wetland and  
21 wildlife viewing area is located on a former artillery range  
22 and this former firing range control tower is now being used

1 as a wildlife observation point. Now that the military  
2 completed a surface sweep for UXO rather than an extensive  
3 excavation, this delicate habitat was allowed to remain and  
4 visitors can safely enjoy viewing the various wildlife  
5 species thriving in this environment. This decision to save  
6 precious acres of forest and wetlands is a common  
7 denominator in many installations where these secured lands  
8 have preserved numerous species of plant and animal life.  
9 At Ft. McClellan in Aniston, Alabama reuse authorities are  
10 considering a proposed Mountain Longleaf National Wildlife  
11 Refuge to protect the last known naturally maintained  
12 Mountain Longleaf Pine community. With the help of the U.  
13 S. Fish and Wildlife Service, the land could not only  
14 preserve these four hundred (400) year old pines but  
15 preserve the habitats for over two hundred (200) plant  
16 species, two hundred (200) bird species and approximately  
17 forty (40) animal species as well. There is a lot of  
18 benefits, those essetically but morally economically from -  
19 from having a ah recreational ah area such as a National  
20 Wildlife Refuge. We get many visitors and people coming  
21 into the area. They - they spend their money locally. Ah  
22 that's a positive side economically. Morally you have a

1 responsibility ah for future generations to - to do  
2 something when you have something that's unique and as  
3 different as this. I think many in the local communities  
4 have identified that. People want to see the mountains  
5 remain undisturbed and undeveloped and that's basically what  
6 we're doing so they will be there for future generations to  
7 enjoy and really will enhance the quality of life in local  
8 communities. Through wise balanced decision maker these  
9 decision makers can protect public safety and the  
10 environment. A close examination of the impact UXO  
11 Clearance will have on animal and plant habitats in your  
12 area may be one (1) of the most important factors you can  
13 consider for the future of that land. These decisions you  
14 make about land use, UXO Clearance and environmental  
15 preservation depend upon your community's unique needs and  
16 circumstances. Your participation is critical in deciding  
17 the fate of these areas. Without your support we risk  
18 losing some of the world's most beautiful lands.

19

20 ( VIDEO OVER )

21

22 MR. PAUL CLOUD:

23

24

1 Any questions? Bob?

2

3

4 **MR. BOB HUDSON:**

5 I don't have a question but I guess I have a  
6 comment. Ah I guess they didn't show JPG in that group  
7 because hearing it it was just probably out of the question  
8 as far as technology they were showing. It looked like they  
9 might have showed it as us being on this place, preserved it  
10 for habitat purposes.

11

12 **MR. PAUL CLOUD:**

13 Well they could have. We were just provided  
14 this - this video a few weeks ago. Ah JPG was peripherally  
15 mentioned in there when they talked about the technology,  
16 development going back all the way to 1994. That was as you  
17 well know was actually performed at JPG for a number of  
18 years.

19

20 **MR. BOB HUDSON:**

21 It looks like they would have capitalized at  
22 the end on the big place that they were preserving.

23

24

1  
2           **MR. PAUL CLOUD:**  
3  
4

5                       I think if they come out with a revision of  
6       that that would be a suggestion that it's well taken. I can  
7       make that to the Army Environmental Center. I appreciate  
8       it. Any other comments or questions? Okay what I would  
9       like to do now is go on to the Findings of Suitability to  
10      Transfer Ford property. We're talking in this case the  
11      Airfield parcel and the Northern Eastern parcel. We've  
12      talked about the Airfield parcel a number of times. The  
13      next series of slides you've seen so I will go through them  
14      fairly quickly as far as what has been done, the sequence of  
15      events that we went through on the initial FOST and the  
16      initial reviews and the comments and the re-evaluation of  
17      the parcels (showing). The fact that we did have some  
18      outstanding comments, they have been identified and attached  
19      to the FOST and the Army has provided a response to them.  
20      The document is currently at the Army Materiel Command which  
21      is AMC. It was sent up there last week. I had a discussion  
22      with one (1) of the staff this morning on that. They're  
23  
24



1 currently reviewing it. They expect to be able to make a  
2 decision on its either acceptance or rejection by the end of  
3 this month. If it's accepted then it will be signed off.  
4 The Louisville Corps of Engineers real estate office will  
5 then be directed to prepare a Deed for the transfer of that  
6 parcel to the Ford Lumber and Building Supply Company and  
7 any Deed restrictions that were identified in the FOST will  
8 be incorporated into the Deed. If it is rejected then they  
9 will come back and provide direction as to whatever  
10 additional work they feel is necessary. At this time that's  
11 currently an unknown. I will say however that in all the  
12 previous FOSTs that we have sent up there none have been  
13 rejected. (Indicating) This is the outline of the - of the  
14 parcel. It's about seven hundred and sixty (760) acres.  
15 Now the next - the next parcel is the Northeast parcel.  
16 Tonight we are providing it for initial public review and  
17 comment. There are copies of it back on the table. This is  
18 a parcel that you will see in later slides, about four  
19 hundred and fifty (450) acres. It's in the Northeast Corner  
20 of the Cantonment Area. We have - the only issue that was  
21 really present in this parcel was a UXO Clearance that we  
22 actually did and we actually did some residual soil sampling  
23

1 and analysis for residual metals and explosives. And that  
2 was done earlier this year. The State had some comments.  
3 We responded to the State. The State came back and provided  
4 their ah final document to us today and as a result of that  
5 we are putting out the - the FOST for Initial Comment and  
6 Review starting tonight and requesting comments or  
7 concurrence by the end of September. This shows you the  
8 basic outline of the parcel. When you look on your slide  
9 you'll see on the left hand side there is a little dog leg  
10 that goes around a group of buildings. The reason why that  
11 is there is because that little section of buildings has  
12 already been transferred. In fact that parcel actually  
13 belongs to the Indiana Solid Waste Management District. Are  
14 there any questions on either the Airfield FOST or the  
15 Northeast parcel FOST?

16

17 **MR. KEVIN HERRON:**

18 Paul?

19

20 **MR. PAUL CLOUD:**

21 Yes sir?

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**MR. KEVIN HERRON:**

Where is the EPA comments?

**MR. PAUL CLOUD:**

We received nothing from the EPA. They were provided the exact same material information that IDEM was provided. We received no comments, no concurrence, no response whatsoever.

**MR. KEN KNOUF:**

Paul, actually I have a question.

**MR. PAUL CLOUD:**

Go ahead.

**MR. KEN KNOUF:**

Fish and Wildlife Service is actually doing endangered species work in that area. If they were to find an endangered species how might that affect the way the FOST was done?

1                   **MR. PAUL CLOUD:**

2                   It would impact on the environmental  
3                   restrictions that would be incorporated into the FOST and  
4                   that then would subsequently be transferred into the Deed.  
5                   The parcel will not be transferred until after we get that  
6                   report done. Expect that report to come out probably the  
7                   end of September. The FOST you know won't be in a condition  
8                   where it would be sent up to the Army Materiel Command until  
9                   probably the end of this year at the earliest. So we have  
10                  plenty of time before you know that decision has to be made  
11                  and forward on to incorporate any information like that.  
12                  And similar for wetlands. The Corps, the Louisville  
13                  District has done a wetlands check in that area also. Any  
14                  impact as far as reuse restrictions would also be  
15                  incorporated in the document regarding wetlands. Any other  
16                  questions?

17

18                   **MR. RICHARD HILL:**

19                  On the ah soil sampling for explosives and  
20                  metals, can you give us some kind of idea what was - what  
21                  was found there and just some general comments that IDEM  
22                  provided and just some more information?

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**MR. PAUL CLOUD:**

Well we have an IDEM representative here. We basically didn't find much of anything as far as metals or explosives. I mean you will obviously find some things. The detection level - the ability to detect things now has gotten so good that you can find almost single atoms of things. But the - the action levels where you have to go in because the level of contamination is - is so high, we have not ever encountered on a UXO Clearance item where we've actually gone back in and actually sampled the craters where the actual detonations occurred.

**MR. RICHARD HILL:**

Un-huh (yes).

**MR. PAUL HILL:**

Which would have - would have the highest probably of the - of the greatest contamination or potential contamination. Kevin can answer your questions as far as you know any specific comments he might have had.

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**MR. KEVIN HERRON:**

The only issue that was raised with regard to our chemist was an issue with background so that they could compare background levels to levels that nails can't provide chemists.

**MR. RICHARD HILL:**

Un-huh (yes).

**MR. KEVIN HERRON:**

Once she got - once she got the background data she can compare them then that would be the issue that she would have problems about that.

**MR. RICHARD HILL:**

Okay.

**MS. DIANE HENSHEL:**

So are you providing that information to the RAB?

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**MR. PAUL CLOUD:**

We will be yes.

**MS. DIANE HENSHEL:**

All the chemical information too?

**MR. PAUL CLOUD:**

Yeah.

**MS. DIANE HENSHEL:**

Is it - I know it's --

**MR. PAUL CLOUD:**

It's not in the FOST.

**MR. RICHARD HILL:**

It's not in the FOST no.

**MR. PAUL CLOUD:**

The FOST is - the FOST is not a document  
designed to ah provide or incorporate in it the entirety of

1 a document like that. It's provided by a reference and if  
2 there is a request or a need to provide that then we will  
3 provide that.

4

5 **MS. DIANE HENSHEL:**

6 So you will be providing that?

7

8 **MR. PAUL CLOUD:**

9 Yeah. No problem.

10

11 **MS. DIANE HENSHEL:**

12 Including the other information that the  
13 IDEM people asked for?

14

15 **MR. PAUL CLOUD:**

16 Sure.

17

18 **MS. DIANE HENSHEL:**

19 The background samples?

20

21 **MR. PAUL CLOUD:**

22 Sure.

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**MS. DIANE HENSHEL:**

Okay.

**MR. PAUL CLOUD:**

No problem.

**MS. DIANE HENSHEL:**

The other question I have is have you - I noticed in the process they have no indications of PCB use. Did you go back to - do you intend to go back and find any indications of PCB use on site yet?

**MR. PAUL CLOUD:**

I have looked at that as we discussed it in Madison, Wisconsin. And the only area that we can find anything is that it was - there was probably some PCB stored as in oil vats like you mentioned before in our one (1) year RCRA storage facility out at the Airfield. That has been closed in accordance with the State approved plan. So that is the only area that we know of where "PCBs would have been" stored.

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**MS. DIANE HENSHEL:**

Would you go back to the Airfield picture a second? I know you have it.

**MR. PAUL CLOUD:**

(Geeting picture) Oops too far. Okay. That building is located right about - let's see, that's the - is the hanger right here. The building is located right about there (indicating). It's building 305.

**MS. DIANE HENSHEL:**

All right.

**MR. PAUL CLOUD:**

It's a small little building.

**MS. DIANE HENSHEL:**

That's fine. It may be a small little building but we still don't have any PCB data on it do we?

**MR. PAUL CLOUD:**

1                   There's no PCB data because that was a one  
2                   (1) year RCRA storage facility.

3

4                   **MS. DIANE HENSHEL:**

5                   So?

6                   **MR. PAUL CLOUD:**

7                   And it was stored in there in accordance  
8                   with approved requirements under the State administered  
9                   plan.

10

11                  **MS. DIANE HENSHEL:**

12                  That's not the question.

13

14                  **MR. PAUL CLOUD:**

15                  When it was cleared - when it was cleaned  
16                  and - and the - the permit that we have with the State was  
17                  closed out the sampling for that was done. I have a  
18                  cardboard box back at Aberdeen with the entire Closure  
19                  Report and all the sampling and analysis and the process and  
20                  the procedure for that building if you would like to you  
21                  know look at it.

22

23

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1                   **MS. DIANE HENSHEL:**

2                               I would like to see all the PCB related  
3 data.

4

5                   **MR. PAUL CLOUD:**

6                               I will go back when I'm back next week and  
7 see what I can find.

8                   **MS. DIANE HENSHEL:**

9                               Before you go off and finish off on this  
10 FOST.

11

12                   **MR. PAUL CLOUD:**

13                               Well the FOST for the Airfield is already  
14 complete. It's already up for review.

15

16                   **MS. DIANE HENSHEL:**

17                               Right. But I mean it seems to me therefore  
18 that it's important to know if this is where the PCBs were  
19 stored on site that the PCB data was (a) valid and (b)  
20 indicate indicative of acceptable for residential levels  
21 since you are allowing this to be residential.

22

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1                   **MR. PAUL CLOUD:**

2                   We're not allowing it. We're indicating  
3                   that we believe it is safe for that. The community has the  
4                   zoning authority. They make the final decision.

5

6                   **MS. DIANE HENSHEL:**

7                   Yeah. Okay Paul but that's not the  
8                   question. The question is what are the results on the PCB  
9                   data?

10                  **MR. PAUL CLOUD:**

11                  Well I will - you know if they're available  
12                  I will provide them.

13

14                  **MS. DIANE HENSHEL:**

15                  And whether they're valid or they're not  
16                  valid.

17

18                  **MR. PAUL CLOUD:**

19                  We believe they were valid. Because all  
20                  that was stored in there were ah containers.

21

22                  **MS. DIANE HENSHEL:**

23

24

1 I'm looking at the chemistry on it remember  
2 because there's so many problems with the PCBs.

3

4 **MR. PAUL CLOUD:**

5 I understand that.

6

7 **MS. DIANE HENSEL:**

8 Okay. It's a very different question than  
9 what you just said.

10

11

12 **MR. PAUL CLOUD:**

13 Okay. If it's available in that report we  
14 will find it and I will send it to you. Like I say the  
15 cardboard box is about three and a half (3 ½) feet long by  
16 about a foot and a half (1 ½) tall.

17

18 **MS. DIANE HENSEL:**

19 Enjoy it.

20

21 **MR. PAUL CLOUD:**

22 No. I'll probably Fed Ex it to you and say

23

24

1       here it is, you find it.

2

3               **MS. DIANE HENSHEL:**

4                       In which case I would ask that nothing else  
5       happen on the FOST until we see the data because of the  
6       residential comments.

7

8               **MR. PAUL CLOUD:**

9                       Noted.

10

11               **MS. DIANE HENSHEL:**

12                       Thank you.

13

14               **MR. RICHARD HILL:**

15                       We do have a county commissioner here which  
16       we could plead to them.

17

18               **MR. PAUL CLOUD:**

19                       I understand that.

20

21               **MR. RICHARD HILL:**

22                       To do something about the zoning out there.

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**MR. PAUL CLOUD:**

I understand that.

**MR. RICHARD HILL:**

So that it is not used for residential  
purposes.

**MR. PAUL CLOUD:**

But that is a - that is a community  
decision. Zoning does not apply to federally owned  
property. Ah Mr. Ford has been made aware of that that once  
the property has been transferred to him he has to deal with  
the community and the Zoning Board who has that statutory  
authority. We will not be involved in that issue. Okay if  
there are no further questions on either the Airfield area  
or the Northeastern parcel I'd like to discuss the Depleted  
Uranium License Termination status. Okay. We originally  
provided the termination request and the report to the NRC  
in June of last year. It was also mailed to the entire JPG



1 mailing list. It was posted on our Web site. The NRC  
2 looked at it for about there (3) months. The end of  
3 September of last year they came back with a number of  
4 questions, required us to go back and revise the document.  
5 We have done that. The revised document was submitted to  
6 the NRC the 27th of June this year. We also provided copies  
7 to everyone on our mailing list, about two hundred (200)  
8 people. They got copies of the entire License Termination  
9 Plan and the Environmental Report which was also submitted  
10 to the NRC. Also the documents are both up on the JPG Web  
11 site and that's the address you can use to go directly to  
12 them. They're fairly large. We tried to break them out  
13 into sections so that you wouldn't have one (1) massive long  
14 download, but there are some sections that are still fairly  
15 big. Okay currently the NRC is in the process of performing  
16 their what's called an Administrative Review. They have  
17 ninety (90) days to complete that. One (1) of the handouts  
18 we have on the back table there shows their chronological  
19 sequence of events as far as how they review and how much  
20 time they expect it to take. (Indicating) This slide just  
21 basically talks about the fact that on the 27th of June the  
22 Army also submitted the Environmental Report to the NRC.

23

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1       That was an option under their regulations to request a  
2       license holder provide that to them. It's basically an aide  
3       to their agency because they have to go through a NEPA  
4       exercise and either do an EIS or an EA or justify why one  
5       (1) hasn't - doesn't have to be done. We suspect as we go  
6       along in this process that they will probably do an EA or an  
7       EIS. And they will use a lot of the data that's in our ER  
8       to assist them. Again that was also mailed out to the JPG  
9       mailing list. (Showing) Now as they go through their  
10      review like the last bullet says up there, they may come and  
11      fax us and ask us for additional information or questions.  
12      It's not unusual or abnormal. It's a standard process that  
13      you go through with any regulator. And that would include  
14      the State, the EPA, NRC or anyone else. Should they do that  
15      that will obviously impact and alter their calendar and  
16      their schedule as to how long it will take them to do  
17      things. Because if they ask us for additional information  
18      say on the ER or the License Termination Plan then the  
19      calendar for their completing the next step will obviously  
20      stop until we've provided that additional information.  
21      Right now we're just waiting for them to respond. Once it  
22      has gone past the Acceptance Review and they get into the

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1 Technical Review we understand that they will commence a  
2 series of public meetings and that's part of their Technical  
3 Review process. And my understanding is that they will hold  
4 those in probably all three (3) counties but again that's up  
5 to them. It's their process and their procedure. If you  
6 want any details, specific information, we have a slide here  
7 for their point of contact, Dr. McLaughlin. And he has a  
8 toll free number and an e-mail address you can use to  
9 contact him. And this is that information here  
10 (indicating). Our point of contact is Ms. Joyce  
11 Kuykendall. In fact she's in the audience tonight if anyone  
12 has any questions they would like to specifically ask her.  
13 She is the Radiation Safety Officer for JPG. And she is the  
14 technical expert for this issue on this facility. She works  
15 with me back at Aberdeen. Any comments or questions?  
16 Kevin?

17

18 **MR. KEVIN HERRON:**

19 On their "Gantt" Chart, the NRC "Gantt"  
20 Chart you have here of the time frame does - do all those  
21 reviews follow each other or does any of that go into - has  
22 any of that gone into that content?

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**MR. PAUL CLOUD:**

Excellent question. The answer is yes and  
no.

**MR. KEVIN HERRON:**

That would be like five (5), six (6), seven  
(7) years from now?

**MR. PAUL CLOUD:**

Actually some of those processes are in  
series and some are in parallel. When I first got that from  
them and that was provided to us from the NRC, I had the  
same exact question because I went through and added all the  
numbers sequentially and it came up to some horrendous  
number. Some of those processes are done in parallel and  
some are done in series. I went through and did what I  
thought was a logical parallel and series organization of  
that and then I called Dr. McLaughlin up and asked him, well  
this is what I think. I want to hear from you on what you  
think it's going to take and then I could put that out at  
the RAB meeting. And the bottom line basically - first of

1 all those - those numbers are work days, not calendar days  
2 so you have to multiply them by seven fifths (7/5) because  
3 it doesn't take in Saturday and Sunday. The other thing is  
4 once we went through that process the bottom line is it's  
5 about six (6) years. And that six (6) year clock started  
6 the end of June this year. And it's entirely their process.  
7 Any other comments or questions? Bob?

8

9 **MR. BOB HUDSON:**

10 Paul I - I want to make a couple of comments  
11 and I'll probably making these comments again during the  
12 public portion of the hearing. I'm not a real - I'm not  
13 upset with - I don't go to the extremes of the environmental  
14 issues don't upset me. You know lots of times I'm kind of a  
15 middle of the road person. Knowing that we didn't close JPG  
16 in accordance with the law so we don't necessarily - it  
17 don't hurt to sometimes now follow the law or regulations or  
18 rules. They can be modified and data can be changed as - as  
19 you go along. We're in the process of closing our license  
20 for the first time. So it's a learning process for  
21 everybody involved. It would seem to me for the amount of  
22 money, and I just want to make this point as part of the

23

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1 record, but it seems to me that for the amount of money  
2 involved in monitoring, I mean the amount would not buy  
3 cigars probably for a Congressman for one (1) year okay? So  
4 we're talking about peanuts as far as dollars and cents are  
5 concerned. But if NRC would consider for a data base  
6 generation, one (1) reason, for just generating a data base  
7 for the material in the ground, the type of soil we have,  
8 climatic conditions that we have, environment that we have  
9 in this part of the country, that if they would commit say  
10 to a forty (40) or fifty (50) year monitoring of the  
11 material and after they had done it long enough to satisfy  
12 themselves and the public they could probably some day quit  
13 maybe. And it would also be beneficial to future ah closing  
14 of licenses that they might correlate that data base with  
15 some other situation. That's one (1) point. The second one  
16 (1) would be a PR one (1), just a matter to ease the  
17 concerns in the community. It's such a small amount of  
18 money that NRC could look at those two (2) points, modify  
19 their procedures to consider doing those two (2) things,  
20 regardless of what the law or the rules or regulations say  
21 at this moment in time.

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1                   **MR. PAUL CLOUD:**

2                   I appreciate your comments and I'm sure the  
3                   NRC will be more than happy to hear from you when they hold  
4                   their public hearings. Any other comments or questions?

5

6                   **MR. RICHARD HILL:**

7                   I'd just like to say I agree with Bob. It's  
8                   great. Good plan.

9

10                  **MR. PAUL CLOUD:**

11                  Any other comments or questions? Okay. Our  
12                  next RAB meeting is scheduled for Wednesday, November 6th.  
13                  It will be up in the South Ripley Elementary School just in  
14                  Versailles, Wednesday night 7 P.M. You've been there  
15                  before. I think everyone knows where it is. With that I  
16                  don't have anything else. If there are no further comments  
17                  or questions again I would encourage you to make sure you  
18                  sign in on the attendance sheet. Kevin?

19

20                  **MR. KEVIN HERRON:**

21                  Do you want to give a little status update  
22                  on the - on where we stand in finalizing the Remedial

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1 Investigation?

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3 **MR. PAUL CLOUD:**

4 Good question or good statement. Thank you.

5 There was a meeting the week before last in Madison,  
6 Wisconsin between the Army, IDEM, EPA and the community's  
7 TAP representative. We also had some of our contractor  
8 people there, a lot of technical support. We met for three  
9 (3) days there. Went through a lot of issues, resolved a  
10 number of things, noted a number of comments. We will be  
11 meeting - right now we are scheduled to meet next week at  
12 the Proving Ground to try and finalize the few remaining  
13 outstanding issues regarding the Remedial Investigation  
14 south of the firing line. However, the representative from  
15 the EPA Region Five in Chicago had a personal tragedy at the  
16 airport today and she was supposed to be down here to have  
17 one (1) of her technical support people look at the Proving  
18 Ground to address some issues. Since that did not occur we  
19 may have to put off that meeting for a week. I will find  
20 out in the next few days and let the State and the  
21 community's TAP provider know. So that right now I have not  
22 changed my travel plans for next week but hopefully we will

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24



1 find out in the next few days whether or not that meeting is  
2 on or off and then we will go from there.

3

4 **MR. RICHARD HILL:**

5 What days?

6

7 **MR. PAUL CLOUD:**

8 It was scheduled for Wednesday of next week.

9

10 **MR. RICHARD HILL:**

11 Wednesday of next week.

12 **MR. PAUL CLOUD:**

13 Diane was aware of it and I - I fully  
14 expected her to be there.

15

16 **MS. DIANE HENSHEL:**

17 Yeah the week after meeting --

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19 **MR. PAUL CLOUD:**

20 Well I don't know yet. We will just have to  
21 see what is acceptable to everyone. This was totally  
22 unexpected. Bob?

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**MR. BOB HUDSON:**

Did you go to Madison, Wisconsin just because you got mixed up of what month and date this was?

**MR. PAUL CLOUD:**

No. Actually we went there because the Corps of Engineers' contractor who has done a lot of the field work and actually generated the documents had their offices there and they were - we were able to pull up any of the documents there. They had the repository for everything you know. So it was - it was logical for them from a historical prospective.

**MR. BOB HUDSON:**

It wasn't a coincidence?

**MR. PAUL CLOUD:**

No it was kind of coincidence. First time I had ever been there too. Any other comments or questions? Richard do you have any closing comments?

**MR. RICHARD HILL:**

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No I don't think so.

**MR. PAUL CLOUD:**

Okay then I think we're done. I appreciate everyone coming out and hope to see you in November. Thank you.

\* \* \* \* \*

CONCLUSION OF HEARING

C E R T I F I C A T E

STATE OF INDIANA            )  
                                  ) SS:  
COUNTY OF JEFFERSON        )

I, Sharon Shields, do hereby certify that I am a Notary Public in and for the County of Jefferson, State of Indiana, duly authorized and qualified to administer oaths;  
That the foregoing public hearing was taken by me in shorthand and on a tape recorder on August 14, 2002 in the

1 Madison-Jefferson County Public Library, 420 West Main  
2 Street, Madison, IN; That this public hearing was taken on  
3 behalf of the Jefferson Proving Ground Restoration Advisory  
4 Board pursuant to agreement for taking at this time and  
5 place; That the testimony of the witnesses was reduced to  
6 typewriting by me and contains a complete and accurate  
7 transcript of the said testimony.

8 I further certify that pursuant to stipulation by and  
9 between the respective parties, this testimony has been  
10 transcribed and submitted to the Jefferson Proving Ground  
11 Restoration Advisory Board.

12 WITNESS my hand and notarial seal this 27th day of  
13 August, 2002.

14 Sharon Shields, Notary Public  
15 Jefferson County, State of Indiana

16 My Commission Expires: July 2, 2007

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